



SEQUENCE LISTING

<110> Brown, Michael Paul
Howley, Paul Michael

<120> Poxvirus Vector Encoding Prostate Specific Antigens for Treatment of Prostate Cancer

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 ctttctttta taaaatatag cattatttaa ttatacgtc cttcctgtag tcctcagaaa 2700
 atttcttgaa ctttactgtt ttggaatata caagaagtta cttgatcatc cacttcttct 2760
 gatattgttt ctcaatcttt taagattatg attcaaagtt cctgtcccgg tcgaattcga 2820
 caataatcct cttgaaataa agaatttatg taattagttc ttattttgca atacaagtct 2880
 atgtcaatag cacatatatc ccagtcgtgg tccttcggta tatttaaaaa atatagtaat 2940
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 caaattcgat gcattatact aatccttttt ggtattttta catgactata gtctataatc 3120
 tagcgattct ccttttcttg gatgatcgct cctggataat gtgctaatagc gcaacgtctt 3180
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 <213> rat

<400> 5

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Gly Phe Leu Leu Leu Ser Leu Arg Leu Asp Pro Gly Gln Ala Lys
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Glu Leu Lys Phe Val Thr Leu Val Phe Arg His Gly Asp Arg Gly Pro
35 40 45

Ile Glu Thr Phe Pro Asn Asp Pro Ile Lys Glu Ser Ser Trp Pro Gln
50 55 60

Gly Phe Gly Gln Leu Thr Lys Trp Gly Met Gly Gln His Tyr Glu Leu
65 70 75 80

Gly Ser Tyr Ile Arg Arg Arg Tyr Gly Arg Phe Leu Asn Asn Ser Tyr
 85 90 95
 Lys His Asp Gln Val Tyr Ile Arg Ser Thr Asp Val Asp Arg Thr Leu
 100 105 110
 Met Ser Ala Met Thr Asn Leu Ala Ala Leu Phe Pro Pro Glu Gly Ile
 115 120 125
 Ser Ile Trp Asn Pro Arg Leu Leu Trp Gln Pro Ile Pro Val His Thr
 130 135 140
 Val Ser Leu Ser Glu Asp Arg Leu Leu Tyr Leu Pro Phe Arg Asp Cys
 145 150 155 160
 Pro Arg Phe Gln Glu Leu Lys Ser Glu Thr Leu Lys Ser Glu Glu Phe
 165 170 175
 Leu Lys Arg Leu Gln Pro Tyr Lys Ser Phe Ile Asp Thr Leu Pro Ser
 180 185 190
 Leu Ser Gly Phe Glu Asp Gln Asp Leu Phe Glu Ile Trp Ser Arg Leu
 195 200 205
 Tyr Asp Pro Leu Tyr Cys Glu Ser Val His Asn Phe Thr Phe Arg Thr
 210 215 220
 Trp Ala Thr Glu Asp Ala Met Thr Lys Leu Lys Glu Leu Ser Glu Leu
 225 230 235 240
 Ser Leu Leu Ser Leu Tyr Gly Ile His Lys Gln Lys Glu Lys Ser Arg
 245 250 255
 Leu Gln Gly Gly Val Leu Val Asn Glu Ile Leu Lys Asn Met Lys Leu
 260 265 270
 Ala Thr Gln Pro Gln Lys Ala Arg Lys Leu Ile Met Tyr Ser Ala Tyr
 275 280 285
 Asp Thr Thr Val Ser Gly Leu Gln Met Ala Leu Glu Leu Tyr Asn Gly
 290 295 300
 Leu Leu Pro Pro Tyr Ala Ser Cys His Ile Met Glu Leu Tyr Gln Asp
 305 310 315 320
 Asn Gly Gly Thr Phe Val Glu Met Tyr Tyr Arg Asn Glu Thr Gln Asn
 325 330 335

Glu Pro Tyr Pro Leu Thr Leu Pro Gly Cys Thr His Ser Cys Pro Leu
340 345 350

Glu Lys Phe Ala Glu Leu Leu Asp Pro Val Ile Pro Gln Asp Trp Ala
355 360 365

Thr Glu Cys Met Gly Thr Ser Asn His Gln Ala Ser Leu
370 375 380

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Met Arg Ala Ala Pro Leu Leu Leu Ala Arg Ala Ala Ser Leu Ser Leu
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Gly Phe Leu Phe Leu Leu Phe Phe Trp Leu Asp Arg Ser Val Leu Ala
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Lys Glu Leu Lys Phe Val Thr Leu Val Phe Arg His Gly Asp Arg Ser
35 40 45

Pro Ile Asp Thr Phe Pro Thr Asp Pro Ile Lys Glu Ser Ser Trp Pro
50 55 60

Gln Gly Phe Gly Gln Leu Thr Gln Leu Gly Met Glu Gln His Tyr Glu
65 70 75 80

Leu Gly Glu Tyr Ile Arg Lys Arg Tyr Arg Lys Phe Leu Asn Glu Ser
85 90 95

Tyr Lys His Glu Gln Val Tyr Ile Arg Ser Thr Asp Val Asp Arg Thr
100 105 110

Leu Met Ser Ala Met Thr Asn Leu Ala Ala Leu Phe Pro Pro Glu Gly
115 120 125

Val Ser Ile Trp Asn Pro Ile Leu Leu Trp Gln Pro Ile Pro Val His
130 135 140

Thr Val Pro Leu Ser Glu Asp Gln Leu Leu Tyr Leu Pro Phe Arg Asn
145 150 155 160

Cys Pro Arg Phe Gln Glu Leu Glu Ser Glu Thr Leu Lys Ser Glu Glu
165 170 175

Phe Gln Lys Arg Leu His Pro Tyr Lys Asp Phe Ile Ala Thr Leu Gly
10

180										185										190													
Lys	Leu	Ser	Gly	Leu	His	Gly	Gln	Asp	Leu	Phe	Gly	Ile	Trp	Ser	Lys																		
		195					200					205																					
Val	Tyr	Asp	Pro	Leu	Tyr	Cys	Glu	Ser	Val	His	Asn	Phe	Thr	Leu	Pro																		
	210					215					220																						
Ser	Trp	Ala	Thr	Glu	Asp	Thr	Met	Thr	Lys	Leu	Arg	Glu	Leu	Ser	Glu																		
	225				230					235					240																		
Leu	Ser	Leu	Leu	Ser	Leu	Tyr	Gly	Ile	His	Lys	Gln	Lys	Glu	Lys	Ser																		
				245					250					255																			
Arg	Leu	Gln	Gly	Gly	Val	Leu	Val	Asn	Glu	Ile	Leu	Asn	His	Met	Lys																		
			260					265					270																				
Arg	Ala	Thr	Gln	Ile	Pro	Ser	Tyr	Lys	Lys	Leu	Ile	Met	Tyr	Ser	Ala																		
		275					280					285																					
His	Asp	Thr	Thr	Val	Ser	Gly	Leu	Gln	Met	Ala	Leu	Asp	Val	Tyr	Asn																		
	290					295					300																						
Gly	Leu	Leu	Pro	Pro	Tyr	Ala	Ser	Cys	His	Leu	Thr	Glu	Leu	Tyr	Phe																		
	305				310					315					320																		
Glu	Lys	Gly	Glu	Tyr	Phe	Val	Glu	Met	Tyr	Tyr	Arg	Asn	Glu	Thr	Gln																		
				325					330					335																			
His	Glu	Pro	Tyr	Pro	Leu	Met	Leu	Pro	Gly	Cys	Ser	Pro	Ser	Cys	Pro																		
			340					345					350																				
Leu	Glu	Arg	Phe	Ala	Glu	Leu	Val	Gly	Pro	Val	Ile	Pro	Gln	Asp	Trp																		
		355					360					365																					
Ser	Thr	Glu	Cys	Met	Thr	Thr	Asn	Ser	His	Gln	Gly	Thr	Glu	Asp	Ser																		
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Thr	Asp																																
	385																																

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 20 25 30
 Thr Gln Leu Gln Leu Glu His Leu Leu Leu Asp Leu Gln Met Ile Leu
 35 40 45
 Asn Gly Ile Asn Asn Tyr Lys Asn Pro Lys Leu Thr Arg Met Leu Thr
 50 55 60
 Phe Lys Phe Tyr Met Pro Lys Lys Ala Thr Glu Leu Lys Gln Leu Gln
 65 70 75 80
 Cys Leu Glu Glu Glu Leu Lys Pro Leu Glu Glu Val Leu Asn Leu Ala
 85 90 95
 Gln Ser Lys Asn Phe His Leu Arg Pro Arg Asp Leu Ile Ser Asn Ile
 100 105 110
 Asn Val Ile Val Leu Glu Leu Lys Gly Ser Glu Thr Thr Phe Met Cys
 115 120 125
 Glu Tyr Ala Asp Glu Thr Ala Thr Ile Val Glu Phe Leu Asn Arg Trp
 130 135 140
 Ile Thr Phe Cys Gln Ser Ile Ile Ser Thr Leu Thr
 145 150 155

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<210> 9
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 <213> rat

<400> 9
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<210> 10
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 <212> DNA
 <213> human

<400> 10
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<210> 11
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